

# UNITED STATES PATENT AND TRADEMARK OFFICE

XV.

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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,099	09/12/2003		Andrew Vaillant	029849-0203	6577
20988	7590	08/24/2005	•	EXAMINER	
OGILVY R			WANG, LOUISE Z		
SUITE 1600		LEGE AVENUE	ART UNIT	PAPER NUMBER	
MONTREAL, QC H3A2Y3				1648	
CANADA				DATE MAILED: 08/24/2003	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/661,099	VAILLANT ET AL.					
Office Action Summary	Examiner	Art Unit					
	Louise Wang	1648					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on							
2a) This action is <b>FINAL</b> . 2b) This	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3) Since this application is in condition for allowan	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E.	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-38</u> is/are pending in the application.		·					
4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.						
. <u> </u>	Claim(s) is/are rejected.						
•	Claim(s) is/are objected to.						
8) Claim(s) 1-38 are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:							
<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>							
3. Copies of the certified copies of the priority documents have been received in Application No							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)		·					
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary Paper No(s)/Mail Da						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal P	atent Application (PTO-152)					
Paper No(s)/Mail Date	6)  Other:						

Application/Control Number: 10/661,099

Art Unit: 1648

### **DETAILED ACTION**

Page 2

### Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2, and 14-32, in part, drawn to a method for the prophylaxis or treatment of a HIV infection in a human, comprising administering one anti-HIV, non-complementary oligonucleotide of at least 29 nucleotides in length, classified in class 424, subclass 9.2.
- II. Claims 3-13, and 12-32, in part, drawn to a pharmaceutical composition comprising one anti-HIV, non-complementary oligonucleotide of 29 nucleotides in length and one other antiviral drug in combination, a liposomal delivery system, and a pharmaceutically acceptable carrier, and a kit comprising the composition, classified in class 435, subclass 6.
- III. Claims 33-37, drawn to a method for selecting an anti-HIV oligonucleotide, comprising synthesizing a plurality of different oligonucleotides, wherein at least one of the different oligonucleotides is at least 29 nucleotides in length and the oligonucleotides are non-complementary to HIV mRNA, testing the oligonucleotides for activity in inhibiting the ability of HIV to produce infectious virions, selecting an oligonucleotide having a pharmaceutically acceptable level of activity for use as an anti-HIV agent, classified in class 435, subclass 6.
- IV. Claim 38, drawn to a method for the prophylaxis or treatment of a HIV infection in a subject, comprising administering one pharmacologically acceptable non-

Art Unit: 1648

complementary anti-HIV oligonucleotide at least 10 nucleotides in length, classified in class 424, subclass 9.2.

The inventions are distinct, each from the other because:

Inventions II and III are unrelated. Invention II is directed to one 29-mer, non-complementary, anti-HIV oligonucleotide combined with another antiviral drug formulated in a liposome for delivery. Invention III is directed to a method of selecting a non-complementary, anti-HIV oligonucleotide. These Inventions are unrelated because they are not disclosed as capable of use together and they have different modes of operation, different functions, and different effects (MPEP § 806.04, MPEP § 808.01).

Inventions I, III, and IV are different methods with respect to starting materials, physiological mechanisms, protocol procedures, and end products; therefore, each method is patentably distinct.

Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case method of Invention I can use a different product such as protease inhibitors, reverse transcriptase inhibitors, integrase inhibitors, and fusion inhibitors, or combinations of.

Art Unit: 1648

These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct method steps. Therefore restriction for examination purposes as indicated is proper. Furthermore, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention.

## Species Election

This application contains claims directed to the following patentably distinct species of the claimed invention:

Irrespective of which Group is elected, Applicant is first required to select two oligonucleotides with specific sequences listed by SEQ ID NO.'s and structures showing any chemical modification.

If Group I, III or IV is elected, Applicant is further required to elect a specific second antiviral drug with either sequence listed by SEQ ID NO or chemical structure.

Additionally, if Group II is elected, Applicant is further required to elect a specific second antiviral drug with either sequence listed by SEQ ID NO or chemical structure as well as the composition and structure of the liposome formulation.

Application/Control Number: 10/661,099

Art Unit: 1648

These species are distinct because their sequences and /or structures, functions, modes of action, binding specificity, inhibition potency, viral protein interaction, bioavailability, tissue distribution, toxicity, and pharmacokinetic properties are different; thus, each represents patentably distinct subject matter.

Furthermore, the examination of these species would require different searches in the scientific literature, which would not be coextensive. As such, it would be burdensome to search these species together.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to

Art Unit: 1648

be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

#### Conclusion

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Application/Control Number: 10/661,099 Page 7

Art Unit: 1648

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louise Wang whose telephone number is 571-272-5543. The examiner can normally be reached on Mon-Fri, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

L. Wang Aug. 10, 2005

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600